Treasury Yield Curve

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Treasury yield curve is the term structures of treasury yields-to-maturity. The yield is also called the zero coupon rate or the implied forward rate.

Treasury yield curves are bootstrapped from treasury benchmark curves that contain the most actively traded treasury bills or bonds at some maturities.

Treasury Yield Curve

There are four elements in interest rate: zero rates, discount factor, par yields, and forward rates.

The derivation of one of these element is conveniently sufficient for the determination of the other three elements.

Each interest rate definition is derived from specific representations of bond price.

Treasury Yield Curve

The zero rate is the yield implied by the different between a zero coupon bond's current purchase price and the value it pays at maturity.

A given zero rate applies only to a single point in the future and, as such, can only be used to discount cash flows occurring on this date.

curves are produced by imputing yields and/or prices.

Curves generated will be used to generate particular risk measures.

Treasury Yield Curve

The discount factor for a corresponding term to maturity is equal to exp(-Z*T), where Z is the continuously compounded zero rate from 0 to T and T is the maturity date.

The calculation of zero rates and their associated discount factors is essential for asset pricing.

A treasury bond is a debt security issued by a government. Treasury Bond include amortization, sinking notional, call/put provisions, and much more.

Thank You

Reference:

https://finpricing.com/FinPricing-ProductBrochure.pdf